[]

SEQUENCE LISTING.txt

SEQUENCE LISTING

<221> MOD_RES

```
<110> DuPont Pharmaceuticals Company
```

<120> Peptidase-cleavable, targeted antineoplastic drugs a nd their therapeutic use

```
<130> PH-7134
<150> 60/189,387
<151>
      2000-03-15
<160>
      210
<170>
     PatentIn version 3.0
<210>
      1
<211>
      5
<212>
      PRT
<213>
      Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> 4-methoxy-benzenesulfonyl-beta-alanine
<220>
<221> MOD_RES
<222>
      (3)..(3)
<223>
     homophenylalanine
<400> 1
Xaa Gly Xaa Tyr Leu
                5
<210>
     2
<211>
      5
<212>
      PRT
<213> Artificial
<220>
<223>
     no comment
<220>
```

```
SEQUENCE LISTING.txt
        <222> (1)..(1)
        <223> 1,2-C6H4(CO)2-histidine
        <220>
        <221> MOD_RES
        <222>
              (3)..(3)
        <223>
               homophenylalanine
        <400>
               2
       Xaa Gly Xaa Tyr Leu
                        5
       <210>
               3
       <211>
              5
       <212>
              PRT
[]
       <213>
             Artificial
4[]
(I)
       <220>
[]
       <223>
             no comment
H
£()
       <220>
Ш
       <221>
              MOD_RES
[]
       <222>
              (1)..(1)
Œ
[]
       <223>
              acetyl-proline
H
ļ
       <400> 3
[7]
Xaa Leu Gly Leu Leu
---
                       5
       <210> 4
       <211> 5
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221>
              MOD_RES
      <222>
              (1)..(1)
      <223>
             acetyl-proline
      <400>
             4
```

Xaa Leu Gly Leu Leu

```
SEQUENCE LISTING.txt
                 5
       Artificial
      no comment
<221> MOD_RES
       (2)..(2)
<223> beta alanine
      MOD_RES
      (1)..(1)
       acetyl-proline
Xaa Xaa Gly Leu Leu
      Artificial
      no comment
<221> MOD_RES
      (2)..(2)
      4-aminobutyric acid
```

<220> <221> MOD_RES (1)..(1) <222> <223> acetyl-proline <400> 6 Xaa Xaa Gly Leu Leu 1 5

1

<210>

<211>

<212>

<213>

<220> <223>

<220>

<222>

<220> <221>

<222>

<223>

<400>

<210>

<211>

<212>

<213>

<220> <223>

<220>

<222>

<223>

5

6

5

PRT

[]

ŧ[]

£() f.j £()

îij L.J

Œ []

Li,

į.

M

[] h-b 5

5

PRT

```
<210> 7
       <211>
       <212> PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222>
             (2)..(2)
       <223> cyclohexylalanine
       <220>
       <221> MOD_RES
       <222> (1)..(1)
[]
       <223> acetyl-proline
111
(I)
[]
       <400> 7
M
       Xaa Xaa Gly Leu Leu
L.J
                       5
       1
Щ
       <210>
             8
       <211>
Ħ
       <212> PRT
ļ.i
       <213> Artificial
177
4:1
       <220>
<223> no comment
       <400> 8
       Pro Leu Gly Leu Leu
                       5
       <210> 9
       <211> 5
       <212> PRT
       <213> Artificial
       <220>
       <223>
            no comment
       <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223>
              MeOCH2CH2OCH2(=O)-proline
                                  Page 4
```

```
<400> 9
       Xaa Leu Gly Leu Leu
       <210> 10
       <211> 5
       <212> PRT
       <213> Artificial
       <220>...
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
11
       <223> MeOCH2CH2OCH2CH2OCH2C(=0)-proline
[]
       <400> 10
(I)
Ü
       Xaa Leu Gly Leu Leu
[i]
                       5
[]
       <210> 11
       <211> 5
Įij.
       <212>
             PRT
4-6
       <213> Artificial
<220>
ļ.i
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> H2NCH2CH2N(CH2CH2)2NCH2C(=0)-proline
       <400>
             11
       Xaa Leu Gly Leu Leu
                       5
       <210> 12
       <211>
       <212>
             PRT
       <213> Artificial
       <220>
```

```
SEQUENCE LISTING.txt
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> AchnCh2Ch2n(Ch2Ch2)2nCh2C(=0)-proline
       <400> 12
       Xaa Leu Gly Leu Leu
                       5
       <210>
             13
       <211>
       <212> PRT
       <213> Artificial
<220>
ţ[]
       <223> no comment
Ü
<220>
£ij.
       <221> MOD_RES
ĹÜ
       <222>
             (1)..(1)
<223> AcN(CH2CH2)2NCH2C(=0)-proline
ſij
[]
       <400> 13
W
-==
      Xaa Leu Gly Leu Leu
JÏ
au.
Į-i-
       <210> 14
       <211>
       <212>
             PRT
       <213>
             Artificial
      <220>
       <223>
             no comment
      <220>
      <221> MOD_RES
      <222>
             (4)..(4)
      <223>
             O-benzyl-serine
      <400> 14
      Pro Leu Gly Xaa
```

```
SEQUENCE LISTING.txt
       <210> 15
       <211> 4
       <212> PRT
       <213>
               Artificial
       <220>
       <223>
              no comment
       <220>
       <221>
              MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <400>
              15
       Xaa Leu Gly Leu
¥I]
       <210>
              16
(I)
       <211>
[]
       <212>
              PRT
ű
       <213>
              Artificial
(i)
Li,
       <220>
Ti,
       <223>
             no comment
[]
       <220>
<221>
             MOD_RES
1-1
       <222>
              (1)..(1)
<223>
              acetyl-glycine
1.1
ļ-i
       <400>
              16
       Xaa Pro Leu Gly Leu
       <210>
              17
       <211>
              6
       <212>
              PRT
       <213>
              Artificial
       <220>
       <223>
             no comment
       <220>
       <221>
              MOD_RES
       <222>
              (1)..(1)
       <223>
              N, N-dimethylglycine
```

```
<220>
        <221> MOD_RES
        <222>
              (3)..(3)
        <223> sarcosine (N-methylglycine)
        <220>
        <221> MOD_RES
        <222> (4)..(4)
        <223> homophenylalanine
        <400>
               17
        Xaa Pro Arg Xaa Xaa Leu
        1
                        5
<210>
               18
<211>
              5
(i)
        <212>
              PRT
<213>
              Artificial
W
Ľ()
       <220>
L.J
       <223>
              no comment
71,
       <220>
£01
       <221> MOD_RES
L.
       <222> (1)..(1)
ļ.i
       <223> acetyl-proline
C.
h-F
       <220>
       <221>
             MOD_RES
       <222>
              (4)..(4)
       <223>
              homophenylalanine
       <400>
              18
       Xaa His Gly Xaa Leu
       <210>
             19
       <211>
              5
       <212>
             PRT
       <213>
              Artificial
       <220>
       <223>
             no comment
```

```
<220>
                                        <221> MOD_RES
                                        <222> (1)..(1)
                                        <223> acetyl-proline
                                        <220>
                                        <221> MOD_RES
                                        <222> (2)..(2)
                                        <223> ornithine
                                        <220>
                                       <221> MOD_RES
                                       <222> (4)..(4)
                                       <223> homophenylalanine
then aftern then then, offer aftern to bear to the train then to the train then to the train the
                                       <400> 19
                                       Xaa Xaa Gly Xaa Leu
                                       <210> 20
 Į.Į
                                       <211> 5
 H
                                       <212> PRT
 æ
                                       <213> Artificial
 L.
                                       <220>
 £=;
                                       <223> no comment
 [7]
 Į.į
                                        <220>
 1-1
                                        <221> MOD_RES
                                       <222> (1)..(1)
                                       <223> acetyl-proline
                                       <220>
                                       <221> MOD_RES
                                       <222> (2)..(2)
                                       <223> diaminoproprionic acid
                                       <220>
                                       <221> MOD_RES
                                       <222>
                                                                         (4)..(4)
                                       <223> homophenylalanine
                                       <400> 20
```

```
Xaa Xaa Gly Xaa Leu
       <210>
             21
       <211> 5
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
<221> MOD_RES
f[]
       <222> (2)..(2)
£()
       <223> N5-aminocarbonylornithine
[]
H
[i]
       <220>
W
       <221> MOD_RES
Īij
       <222> (4)..(4)
       <223>
              homophenylalanine
£.,
Į.
ļ, i
       <400>
              21
LII.
[]
       Xaa Xaa Gly Xaa Leu
ļ.
       1
                        5
       <210>
              22
       <211>
              5
       <212>
             PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223>
              acetyl-proline
       <220>
       <221> MOD_RES
       <222>
             (4)..(4)
```



Page 11

```
<223>
             (0-(3-pyridyl-)) tyrosine
       <400> 22
       Xaa Leu Gly Xaa Leu
                       5
       <210>
             23
       <211>
       <212>
             PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
<223> acetyl-proline
M
C.
Ĺ()
       <220>
(i)
       <221> MOD_RES
W
       <222>
             (4)..(4)
[[]
             (0-(4-pyridyl-)) tyrosine
       <223>
421
Į.Į
      <400> 23
ļ.i
Xaa Leu Gly Xaa Leu
5
ļu.
       <210> 24
       <211> 5
       <212>
            PRT
       <213>
             Artificial
       <220>
       <223>
            no comment
       <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222> (4)..(4)
             (4-aza-) homophenylalanine
       <223>
```

```
<400> 24
       Xaa Leu Gly Xaa Leu
       <210>
              25
       <211>
       <212>
              PRT
       <213>
              Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222>
              (1)..(1)
£.)
       <223>
              acetyl-proline
ų[]
[i]
<220>
(I)
       <221>
              MOD_RES
(I)
       <222>
              (4)..(4)
(O-benzyl-) serine
       <223>
M
₽
<400>
              25
Щ
ļ.i
       Xaa Leu Gly Xaa Leu
LĴĪ
ļ.
       <210>
              26
       <211>
       <212>
              PRT
       <213>
             Artificial
       <220>
       <223>
              no comment
       <220>
              MOD_RES
       <221>
       <222>
              (1)..(1)
       <223>
              carbobenzyloxy-proline
       <220>
       <221>
              MOD_RES
              (4)..(4)
       <222>
       <223>
              (0-(4-pyridylmethyl-)) tyrosine
```

```
<400> 26
        Xaa Leu Gly Xaa Leu
                         5
        <210>
               27
        <211>
        <212>
              PRT
        <213> Artificial
        <220>
        <223> no comment
       <220>
       <221> MOD_RES
        <222> (1)..(1)
       <223> acetyl-proline
Į.,
ŧĮj
[i]
       <220>
£-5
       <221> MOD_RES
Ü
       <222>
              (3)..(3)
[[]
       <223>
              sarcosine (N-methylglycine)
Į.J
FI,
       <400>
              27
2-1
2-1
ļ.
       Xaa Leu Xaa Leu Leu
ļ.
                        5
C.
       <210>
              28
ļ.,
       <211>
              5
       <212>
              PRT
       <213>
              Artificial
       <220>
       <223>
              no comment
       <220>
       <221>
              MOD_RES
       <222>
              (1)..(1)
       <223>
              acetyl-proline
       <220>
       <221>
              MOD_RES
       <222>
              (2)..(2)
              (N-Me-) leucine
       <223>
```

```
<400> 28
        Xaa Xaa Gly Leu Leu
        1
                         5
        <210> 29
        <211> 5
        <212> PRT
        <213> Artificial
        <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
[]
4[]
       <220>
<221>
              MOD_RES
f:1
       <222> (4)..(4)
<223>
              (N-Me-) leucine
Ēij.
L.
IJ
       <400>
              29
Xaa Leu Gly Xaa Leu
ļļ,
ļ.,
L/I
       <210>
              30
21
       <211>
              5
1-1
       <212>
              PRT
       <213>
             Artificial
       <220>
       <223>
             no comment
       <220>
       <221>
             MOD_RES
       <222>
              (1)..(1)
       <223>
              acetyl 4-hydroxyproline
       <400>
              30
       Xaa Leu Gly Leu Leu
       1
                        5
       <210>
              31
       <211>
              5
```

```
SEQUENCE LISTING.txt
<212>
      PRT
<213>
      Artificial
<220>
<223>
     no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-(thiazolidine-4-carbonyl)
<400> 31
Xaa Leu Gly Leu Leu
<210> 32
<211> 5
<212>
     PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-(Homo-proline)
<400>
      32
Xaa Leu Gly Leu Leu
                5
1
<210> 33
<211> 5
<212>
     PRT
<213> Artificial
<220>
<223> no comment
<220>
```

<220>

<221> MOD_RES <222> (1)..(1)

<223> acetyl-(Homo-proline)

[]

ij.

[i]

Ħ

į,

Hall Ame affin

ğ = 'b

```
SEQUENCE LISTING.txt
        <221>
               MOD_RES
        <222> (4)..(4)
        <223> homophenylalanine
        <400>
               33
        Xaa Leu Gly Xaa Leu
        1
                        5
        <210>
               34
        <211>
        <212>
              PRT
             Artificial
       <213>
       <220>
       <223>
              no comment
f.!
       <220>
۱])
       <221>
              MOD_RES
[[]
       <222>
              (1)..(1)
[.]
       <223>
              acetyl-(Homo-proline)
[[]
C)
<220>
M
       <221>
              MOD_RES
       <222>
              (2)..(2)
£.;
       <223> ornithine
W
ļ.i
177
       <220>
<221>
              MOD_RES
ļ.,5
       <222>
              (4)..(4)
       <223>
              homophenylalanine
       <400> 34
       Xaa Xaa Gly Xaa Leu
                        5
       <210>
              35
       <211>
              5
       <212>
              PRT
       <213>
              Artificial
       <220>
      <223> no comment
      <220>
      <221>
             MOD_RES
```

```
SEQUENCE LISTING.txt
       <222> (1)..(1)
       <223> acetyl-Nipecotate
       <400> 35
       Xaa Leu Gly Leu Leu
       <210> 36
       <211> 5
       <212> PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
£1
       <221> MOD_RES
1
       <222> (1)..(1)
then drift plant.
       <223> acetyl-2-carboxyazetidine
111
       <400> 36
Ļļ
11
       Xaa Leu Gly Leu Leu
                        5
       1
[:}
Ų
       <210> 37
þab
       <211>
             5
<212> PRT
<213>
             Artificial
ļ.
       <220>
       <223>
             no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-cyclohexylglycine
       <400> 37
       Xaa Leu Gly Leu Leu
       1
       <210> 38
             5
       <211>
       <212> PRT
```

<213> Artificial

```
<220>
        <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221>
             MOD_RES
       <222> (2)..(2)
       <223> valerolactam
       <400>
              38
Xaa Xaa Gly Leu Leu
<u>.</u>[]
M
<210>
              39
Ž()
       <211>
              6
(i)
       <212>
              PRT
Lij
       <213>
             Artificial
TU
       <220>
£1
       <223>
             no comment
Ш
ļ.
       <220>
L
       <221>
              MOD_RES
Ţ.
       <222>
              (1)..(1)
ļ-1
       <223>
              acetyl-glycine
       <400> 39
       Xaa Pro Leu Gly Leu Phe
       <210>
              40
       <211>
              6
       <212>
              PRT
       <213>
              Artificial
       <220>
       <223>
             no comment
       <220>
       <221>
              MOD_RES
       <222>
             (1)..(1)
```

```
SEQUENCE LISTING.txt
       <223> acetyl-glycine
       <400> 40
       Xaa Pro Leu Gly Phe Phe
                       5
       <210> 41
       <211> 5
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
<222> (1)..(1)
       <223> acetyl-leucine
Cont April April 1
       <400> 41
(I)
L!
       Xaa Gly Leu Tyr Leu
P
<210> 42
<211> 5
<212> PRT
L
       <213> Artificial
4=1
ğ.
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> cyclopropylcarbonyl-leucine
       <400> 42
       Xaa Gly Leu Tyr Leu
                       5
       1
       <210> 43
       <211>
             5
       <212> PRT
       <213> Artificial
```

```
SEQUENCE LISTING.txt
       <220>
       <223> no comment
       <220>
       <221>
             MOD_RES
       <222>
             (1)..(1)
       <223> cyclobutylcarbonyl-leucine
       <400> 43
       Xaa Gly Leu Tyr Leu
       <210>
             44
       <211>
             5
       <212>
             PRT
       <213>
             Artificial
ij
       <220>
ĹÜ
       <223>
             no comment
£.;
£ij.
       <220>
[i]
       <221>
             MOD_RES
Ш
       <222>
             (1)..(1)
fIJ
       <223>
             pivaloyl-leucine
L()
      <400>
              44
---
Xaa Gly Leu Tyr Leu
ļesk
                       5
       <210>
              45
       <211>
              7
       <212>
             PRT
       <213>
             Artificial
      <220>
      <223>
             no comment
      <220>
      <221>
             MOD_RES
      <222>
             (1)..(1)
      <223>
              4-hydroxproline
      <400> 45
      Xaa Gly Pro Leu Gly Leu Leu
                       5
```

```
<210>
             46
       <211>
       <212>
              PRT
       <213>
             Artificial
       <220>
       <223>
             no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223>
              acetyl-proline
       <400>
              46
       Xaa Leu Gly Leu Ala Leu
[]
£51
T()
       <210>
             47
<211>
              6
[ij
       <212>
             PRT
Ü
       <213>
             Artificial
Į.J
ΓIJ
       <220>
       <223>
             no comment
101
<220>
ļ.
       <221>
             MOD_RES
<222>
              (1)..(1)
į,
       <223>
              acetyl-proline
ļ., b
       <400> 47
       Xaa Leu Gly Leu Tyr Leu
       <210>
              48
       <211>
              6
       <212>
             PRT
       <213>
             Artificial
       <220>
       <223>
              no comment
       <220>
       <221>
              MOD_RES
       <222>
              (1)..(1)
       <223>
              polyethyleneglycol-proline
                                  Page 21
```

```
<400> 48
       Xaa Leu Gly Leu Tyr Leu
       <210> 49
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
Į.j
       <223> H3CC(=0)NH-polyethyleneglycol-proline
Professional
4.5
       <400>
             49
[[]
       Xaa Leu Gly Leu Tyr Leu
[4]
                        5
       1
fIJ
       <210> 50
221
       <211> 6
L.
       <212> PRT
Fab
       <213> Artificial
U
Ü
       <220>
ļ.
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> AcHNCH2CH2N(CH2CH2)2NCH2C(=0)-proline
       <400> 50
       Xaa Leu Gly Leu Tyr Leu
       <210>
              51
       <211> 6
       <212> PRT
             Artificial
       <213>
       <220>
```

```
SEQUENCE LISTING.txt
<223> no comment

<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-proline

<400> 51

Xaa Leu Gly Leu Ser Leu
1 5
```

<210> 52 <211> 6 <212> PRT <213> Artificial <220> <223> no comment

<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-glycine

<400> 52

16" tivih 18" 18 18 1812 Teef

Ĩ()

Ĺ()

M

[]

gram gent ...! frant if if gath that the Xaa Pro Leu Gly Leu Leu 1 5

<210> 53 <211> 6 <212> PRT

<213> Artificial

<220>

<223> no comment

<220>

<221> MOD_RES <222> (1)..(1)

<223> O(CH2CH2)NCH2CH2NHC(=0)-glycine

<400> 53

Xaa Pro Leu Gly Leu Leu 1 5

```
SEQUENCE LISTING.txt
       <210> 54
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-glycine
       <400> 54
       Xaa Pro Leu Gly Leu Tyr
£.1
ij
       <210> 55
then the the that
       <211> 6
       <212> PRT
       <213> Artificial
M
<220>
fi)
       <223> no comment
[]
       <220>
Ш
       <221> MOD_RES
k-1
       <222> (1)..(1)
IJ
       <223> acetyl-proline
į, į
₽.F
       <400> 55
       Xaa Leu Gly Leu Leu Leu
       1
                        5
       <210> 56
       <211>
             6
       <212>
             PRT
       <213>
              Artificial
       <220>
       <223>
             no comment
       <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223> acetyl-glycine
```

```
<220>
       <221> MOD_RES
       <222>
             (5)..(5)
       <223> biphenylalanine
       <400> 56
       Xaa Pro Leu Gly Xaa Phe
       <210> 57
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
<223> no comment
į]
[[]
       <220>
[]
       <221> MOD_RES
Ü
       <222> (1)..(1)
(i)
       <223> acetyl-glycine
Ĺij
Ti.
       <220>
[]
       <221> MOD_RES
<222> (5)..(5)
ļ., b
       <223> norleucine
2
C)
F=1
       <400> 57
       Xaa Pro Leu Gly Xaa Phe
       <210> 58
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> carbobenzyloxy-glycine
```

```
<400> 58
       Xaa Pro Leu Gly Leu Leu
                       5
       <210> 59
       <211>
             6
       <212>
             PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> AcHNCH2CH2N(CH2CH2)2NCH2C(=0)-glycine
£.;
ij
       <400> 59
ĨÜ
[]
      Xaa Pro Leu Gly Leu Leu
(i)
       1
fi
L.J
       <210> 60
ĨIJ,
       <211>
       <212> PRT
[]
       <213> Artificial
L.
al a
       <220>
<223> no comment
L=1
       <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223> H2NCH2CH2N(CH2CH2)2NCH2C(=0)-glycine
      <400> 60
      Xaa Pro Leu Gly Leu Leu
                       5
       <210> 61
       <211> 6
       <212>
             PRT
      <213> Artificial
      <220>
      <223> no comment
```

```
SEQUENCE LISTING.txt
```

```
<220>
       <221> MOD RES
       <222> (1)..(1)
       <223> N,N-dimethylglycine
       <400> 61
       Xaa Pro Leu Gly Leu Leu
       <210> 62
       <211>
             6
       <212> PRT
       <213> Artificial
       <220>
       <223>
            no comment
47
       <220>
ű
       <221>
             MOD_RES
[]
       <222>
             (1)..(1)
[i]
       <223> acetyl-gamma-glutamic acid
(I)
71
      <400>
              62
C)
      Xaa Pro Leu Gly Leu Leu
u
       1
                       5
ļ-1
LII
      <210>
             63
<211>
             6
ļ.
       <212>
             PRT
             Artificial
      <213>
      <220>
      <223> no comment
      <220>
      <221>
            MOD_RES
      <222> (1)..(1)
      <223>
             acetyl-glycine
      <220>
      <221>
            MOD_RES
      <222>
             (5)..(5)
      <223>
            3-thienylalanine
      <400> 63
```

```
Xaa Pro Leu Gly Xaa Phe
       <210>
             64
       <211> 6
       <212>
            PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-glycine
      <220>
1.1
       <221>
            MOD_RES
[()
       <222>
             (5)..(5)
[]
       <223> 2-phenylglycine
Ĩ()
(i)
<400> 64
IJ
      Xaa Pro Leu Gly Xaa Phe
       1
                       5
Ш
₽=Ł
       <210>
             65
<211>
             6
<212>
            PRT
ļ.
            Artificial
       <213>
       <220>
       <223> no comment
      <220>
      <221>
             MOD_RES
       <222>
             (1)..(1)
       <223>
            methoxyacetyl-glycine
      <400>
             65
      Xaa Pro Leu Gly Leu Leu
      <210>
             66
      <211>
             6
      <212>
            PRT
```

```
SEQUENCE LISTING.txt
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> N,N-dimethylglycine
<220>
<221> MOD_RES
<222> (5)..(5)
<223> 3-thienylalanine
<400> 66
Xaa Pro Leu Gly Xaa Leu
<210> 67
<211>
<212>
      PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> N,N-dimethylglycine
<220>
<221> MOD_RES
<222>
      (5)..(5)
<223> 2-phenylglycine
<400> 67
Xaa Pro Leu Gly Xaa Leu
                5
```

that that that

Li)

Πij

W

10 Hans

Į.)

ļ.

<210> 68 <211> 6

<211> 6 <212> PRT

<213> Artificial

```
<220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> N.N-dimethylglycine
       <220>
       <221> MOD_RES
       <222> (5)..(5)
       <223> O-benzyl-tyrosine
       <400> 68
[]
       Xaa Pro Leu Gly Xaa Leu
£[]
Ü
[]
       <210> 69
(i)
Įij,
       <211> 6
       <212> PRT
IJ.
       <213> Artificial
M
E
[]
       <220>
       <223> no comment
4
F=F
H
       <220>
       <221> MOD_RES
[]
       <222> (1)..(1)
-i-
       <223> N,N-dimethylglycine
       <220>
       <221> MOD_RES
       <222> (5)..(5)
              biphenylalanine
       <223>
       <400> 69
       Xaa Pro Leu Gly Xaa Leu
                        5
       1
        <210> 70
        <211> 6
        <212> PRT
        <213> Artificial
```

```
<220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-glycine
      <220>
      <221> MOD_RES
       <222> (6)..(6)
       <223> biphenylalanine
       <400> 70
       Xaa Pro Leu Gly Phe Xaa
[.]
4[]
[i]
       <210> 71
5=1
5=1
       <211> 6
ĹÜ
       <212> PRT
£()
       <213> Artificial
IJ
M
       <220>
       <223> no comment
Щ
       <220>
ļ=b
       <221> MOD_RES
<222> (1)..(1)
ļ.
       <223> acetyl-glycine
       <220>
       <221> MOD_RES
       <222> (6)..(6)
       <223> biphenylalanine
       <400> 71
       Xaa Pro Leu Gly Leu Xaa
       <210>
              72
       <211>
              6
       <212> PRT
       <213> Artificial
       <220>
```

```
<223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-glycine
      <220>
      <221> MOD_RES
       <222> (5)..(5)
       <223> 2-naphthylalanine
       <220>
       <221> MOD_RES
       <222> (6)..(6)
       <223> biphenylalanine
[]
<400> 72
127
ť
       Xaa Pro Leu Gly Xaa Xaa
Ü
Li
ru,
       <210> 73
Œ
<211> 6
IJ
       <212> PRT
             Artificial
F=F
       <213>
LII
[]
       <220>
       <223> no comment
F=t
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-glycine
             73
       <400>
       Xaa Pro Leu Gly Phe Ala
                        5
       1
       <210>
              74
       <211>
              6
       <212> PRT
        <213> Artificial
       <220>
        <223> no comment
```

```
<220>
       <221>
              MOD_RES
       <222>
              (1)..(1)
       <223>
              acetyl-glycine
       <220>
       <221> MOD_RES
       <222>
              (5)..(5)
       <223>
              biphenylalanine
       <400>
              74
       Xaa Pro Leu Gly Xaa Ala
                         5
       1
Ľĵ
       <210>
               75
ŧ]]
       <211>
               6
[i]
Ę.j
       <212>
              PRT
C()
               Artificial
       <213>
£ij.
L
       <220>
[]
       <223>
              no comment
<220>
L, J
       <221> MOD_RES
<u>---</u>
       <222>
              (1)..(1)
Lii
       <223> acetyl-glycine
ļ.i
       <400>
              75
       Xaa Pro Leu Gly Leu Ala
       1
                         5
       <210>
              76
       <211>
       <212>
               PRT
       <213>
              Artificial
       <220>
       <223>
              no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223>
               acetyl-glycine
```

```
<220>
       <221> MOD_RES
       <222> (5)..(5)
              O-benzyl-tyrosine
       <223>
       <400> 76
       Xaa Pro Leu Gly Xaa Phe
                        5
             77
       <210>
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
£.1
       <223> no comment
17
       <220>
[i]
£:}
       <221> MOD_RES
[i]
       <222> (1)..(1)
       <223> acetyl-glycine
Ü
Į,į
ΓIJ
       <400> 77
E
E"!
ļ.
       Xaa Pro Gln Gly Leu Leu
£ 12
L.
Z.)
       <210> 78
!=!
        <211>
               6
        <212> PRT
        <213> Artificial
        <220>
        <223> no comment
        <220>
        <221> MOD_RES
        <222> (1)..(1)
               acetyl-glycine
        <223>
        <400> 78
        Xaa Pro Arg Gly Leu Leu
                         5
               79
        <210>
        <211>
               6
```

```
<212>
             PRT
             Artificial
      <213>
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
       <223> acetyl-glycine
       <220>
       <221> MOD_RES
       <222> (6)..(6)
       <223> 4-pyridyl-alanine
\[]
       <400> 79
Ĩij.
[:)
       Xaa Pro Leu Gly Leu Xaa
                        5
Ü
       1
(I)
Įij
       <210> 80
TU
       <211> 6
Ξ
       <212> PRT
[]
       <213> Artificial
LIJ
į,
       <220>
LII
       <223>
             no comment
(I)
ļ.
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-glycine
       <400> 80
       Xaa Pro Leu Gly Leu Arg
       <210> 81
        <211> 6
        <212> PRT
        <213> Artificial
        <220>
        <223> no comment
        <220>
```

```
SEQUENCE LISTING.txt
        <221> MOD_RES
        <222>
              (1)..(1)
        <223>
              acetyl-glycine
       <400>
              81
       Xaa Pro Leu Gly Leu Trp
                        5
       1
       <210>
              82
       <211>
       <212>
              PRT
       <213>
              Artificial
       <220>
       <223>
              no comment
ga!
\[]
       <220>
ĩ()
       <221> MOD_RES
£.;
       <222>
              (1)..(1)
Ü
       <223> acetyl-glycine
i)
H
M
       <400>
              82
71
       Xaa Pro Leu Gly Val Leu
Į.į
                        5
ļ-i
<210>
              83
î.;
       <211>
j.
       <212>
             PRT
       <213>
              Artificial
       <220>
       <223>
             no comment
       <220>
       <221>
             MOD_RES
       <222>
              (1)..(1)
       <223>
              acetyl-glycine
       <220>
       <221>
              MOD_RES
       <222>
              (5)..(5)
       <223>
              homophenylalanine
```

<400>

83

```
SEQUENCE LISTING.txt
       Xaa Pro Leu Gly Xaa Leu
                        5
       <210>
             84
       <211>
       <212>
             PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223>
              acetyl-glycine
       <400> 84
ī,ļ
[]
       Xaa Pro Leu Ala Leu Leu
£()
[]
M
£()
       <210>
             85
<211>
              6
M
       <212>
              PRT
       <213>
             Artificial
Ē.ļ
<220>
Ē-sb
       <223> no comment
[]
       <220>
₽=F
       <221>
             MOD_RES
       <222>
             (1)..(1)
       <223>
             N, N-dimethylglycine
       <220>
       <221>
             MOD_RES
       <222>
              (5)..(5)
       <223>
             biphenylalanine
       <400>
             85
      Xaa Pro Ile Gly Xaa Leu
                       5
       <210>
              86
       <211>
              6
       <212>
              PRT
       <213> Artificial
```

```
<220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> N,N-dimethylglycine
       <220>
       <221> MOD_RES
       <222> (3)..(3)
       <223> cyclohexylglycine
       <220>
       <221> MOD_RES
<222> (5)..(5)
<223> biphenylalanine
Hat then then the
11)
       <400>
             86
Xaa Pro Xaa Gly Xaa Leu
M
L.
       <210> 87
i ub
       <211> 6
ij.
       <212> PRT
<213> Artificial
ļ.,
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-glycine
       <400> 87
       Xaa Pro Val Gly Leu Leu
                       5
       1
       <210> 88
       <211> 6
       <212> PRT
       <213> Artificial
```

```
SEQUENCE LISTING.txt
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222>
              (1)..(1)
       <223>
              N, N-dimethylglycine
       <400> 88
       Xaa Pro Ile Gly Leu Leu
       <210>
             89
       <211>
       <212>
              PRT
       <213>
             Artificial
[]
Ü
       <220>
<223>
              no comment
M
Ü
       <220>
[4]
       <221>
             MOD_RES
ΓIJ
       <222>
              (1)..(1)
       <223>
             N, N-dimethylglycine
[]
W
[--
       <220>
M
       <221>
             MOD_RES
£:}
       <222>
              (5)..(5)
ļ.i
       <223>
              biphenylalanine
       <400>
              89
       Xaa Pro Arg Gly Xaa Leu
                        5
       <210>
              90
       <211>
              6
       <212>
              PRT
       <213>
             Artificial
       <220>
       <223>
              no comment
       <220>
       <221>
              MOD_RES
       <222>
              (1)..(1)
       <223>
              acetyl-glycine
```

```
<220>
       <221> MOD_RES
       <222>
             (6)..(6)
             O-benzyl-tyrosine
       <223>
       <400>
             90
       Xaa Pro Leu Gly Leu Xaa
                        5
       <210>
             91
       <211>
             6
       <212>
             PRT
             Artificial
       <213>
4.4
       <220>
       <223> no comment
Hand Street
£1
       <220>
       <221> MOD_RES
10
       <222>
              (1)..(1)
4
              acetyl-glycine
       <223>
TI,
Ľ.
       <400> 91
ĮĮ,
Ē=Ŀ
Xaa Pro Leu Gly Glu Leu
Ţj
ļ.:
       <210> 92
       <211> 6
       <212> PRT
             Artificial
       <213>
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222>
              (1)..(1)
       <223> N,N-dimethylglycine
       <220>
       <221> MOD_RES
       <222>
              (5)..(5)
       <223> biphenylalanine
```

```
<400> 92
      Xaa Pro Lys Gly Xaa Leu
      1
      <210>
             93
      <211>
      <212>
            PRT
             Artificial
      <213>
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-glycine
[]
ų[]
M
       <400> 93
£1
EH
       Xaa Pro Leu Gly Leu Glu
ĩij,
Lij
M
       <210> 94
       <211>
              6
       <212> PRT
IJ
       <213> Artificial
h-b
[]
       <220>
å-t
       <223>
             no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-glycine
       <220>
       <221> MOD_RES
       <222> (5)..(5)
       <223> biphenylalanine
       <400> 94
       Xaa Pro Leu Gly Xaa Glu
       <210> 95
```

```
<211> 7
      <212> PRT
      <213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> N,N-dimethylglycine
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> sarcosine (N-methylglycine)
(I)
      <220>
[_]
      <221> MOD_RES
<222> (5)..(5)
      <223> homophenylalanine
Ĭ()
ru,
      <400> 95
£.;
L.
      Xaa Pro Arg Xaa Xaa Arg Leu
į.
[]
       <210> 96
ķ-1
       <211> 7
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> N,N-dimethylglycine
       <220>
       <221> MOD_RES
       <222> (5)..(5)
       <223> homophenylalanine
       <400> 96
```

```
Xaa Pro Arg Gly Xaa Arg Leu
                       5
      <210>
            97
      <211>
             7
             PRT
      <212>
             Artificial
      <213>
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> N,N-dimethylglycine
[]
      <220>
#[]
H
       <221> MOD_RES
<222>
             (5)..(5)
M
       <223> biphenylalanine
Ĩ()
Ħ
       <400> 97
£.¦
       Xaa Pro Arg Gly Xaa Arg Leu
44
                       5
ļ.s b
Į.
       <210> 98
[]
       <211> 6
ļ.:
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-glycine
       <400>
              98
       Xaa Pro Leu Gly Asn Leu
       <210>
              99
       <211>
              6
       <212> PRT
```

```
<213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-glycine
      <400> 99
      Xaa Pro Leu Gly Ser Leu
       1
       <210> 100
707
       <211> 6
       <212> PRT
(I)
      <213> Artificial
The state
      <220>
Ü
      <223> no comment
F.J
      <220>
       <221> MOD_RES
121
       <222> (1)..(1)
Ų
       <223> acetyl-glycine
ļ.
<220>
---
       <221> MOD_RES
       <222> (5)..(5)
       <223> 4-hydroxy-phenyl-glycine
       <400> 100
       Xaa Pro Leu Gly Xaa Leu
       1
       <210> 101
       <211> 6
       <212>
             PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
```

```
SEQUENCE LISTING.txt
                                    <222> (1)..(1)
                                    <223>
                                                                      acetyl-proline
                                    <220>
                                    <221> MOD_RES
                                    <222>
                                                                   (4)..(4)
                                    <223> homophenylalanine
                                    <400>
                                                                   101
                                   Xaa Leu Gly Xaa His Leu
                                                                                                                       5
                                    <210>
                                                                  102
                                    <211>
                                    <212>
                                                                   PRT
 []
                                    <213> Artificial
ļį
of the state of th
                                   <220>
                                    <223> no comment
£()
[i]
                                    <220>
LI)
                                    <221> MOD_RES
F!;
                                    <222> (1)..(1)
                                    <223> acetyl-proline
į.į
L.
}:= L
                                    <220>
ĹĬ
                                    <221> MOD_RES
<222> (4)..(4)
===
                                    <223>
                                                                      homophenylalanine
                                    <400>
                                                                  102
                                    Xaa Leu Gly Xaa Ala Leu
                                    <210> 103
                                    <211>
                                                                   6
                                    <212>
                                                                   PRT
                                    <213>
                                                                   Artificial
                                    <220>
                                    <223>
                                                                  no comment
                                    <220>
                                    <221> MOD_RES
                                    <222> (1)..(1)
```

```
SEQUENCE LISTING.txt
      <223> acetyl-proline
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> homphenylalanine
      <400> 103
      Xaa Leu Gly Xaa Tyr Leu
      <210> 104
      <211>
             6
      <212>
             PRT
      <213> Artificial
£:1
<u>.[]</u>
      <220>
ĩij
      <223>
             no comment
dert den
      <220>
[[]
      <221> MOD_RES
Į.J
      <222>
             (1)..(1)
11
      <223> acetyl-proline
Lij
      <220>
ļ
             MOD_RES
      <221>
<222> (4)..(4)
7.1
      <223> homophenylalanine
<220>
       <221> MOD_RES
       <222> (5)..(5)
       <223> morpholinylpropyl-glycine
       <400> 104
       Xaa Leu Gly Xaa Xaa Leu
       <210> 105
       <211>
             7
       <212> PRT
       <213> Artificial
       <220>
```

```
SEQUENCE LISTING.txt
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-gamma-glutamic acid
<220>
<221> MOD_RES
<222>
      (5)..(5)
<223> homophenylalanine
<400> 105
Xaa Pro Leu Gly Xaa Tyr Leu
<210> 106
<211> 6
<212> PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> succinyl-proline
<220>
<221> MOD_RES
<222> (4)..(4)
<223> homophenylalanine
<400>
     106
Xaa Leu Gly Xaa Tyr Leu
               5
1
<210>
      107
<211>
      6
<212>
     PRT
<213>
     Artificial
```

17

ű

£.]

M

then spirit

[IJ

ļ.;

H

<220>

<223> no comment

```
<220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-proline
      <220>
      <221> MOD_RES
      <222>
             (5)..(5)
             (0-(4-pyridylmethyl)-tyrosine)
      <223>
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> homophenylalanine
<400> 107
Ħ
Xaa Leu Gly Xaa Xaa Leu
fij
      1
                       5
M
Ĺij
      <210> 108
TIJ
       <211> 6
      <212> PRT
<213> Artificial
H
ļ-L
      <220>
Ш
      <223> no comment
£.1
ļ.:
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222> (4)..(4)
       <223> homo-tyrosine
       <400>
              108
       Xaa Leu Gly Xaa Tyr Leu
                       5
       1
       <210>
              109
       <211>
              6
```

```
SEQUENCE LISTING.txt
<212> PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-proline
<220>
<221> MOD_RES
<222> (4)..(4)
<223> 4-aza-homophenylalanine
<400>
     109
Xaa Leu Gly Xaa Tyr Leu
<210>
     110
<211> 6
<212> PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-proline
<220>
<221> MOD_RES
<222> (4)..(4)
<223> (0-(4-pyridyl-)-tyrosine)
<400>
     110
Xaa Leu Gly Xaa Tyr Leu
```

[]

T T

W

fij

###

i e

ļ.L

<210>

<211>

<212>

111

6

PRT

```
SEQUENCE LISTING.txt
```

```
<213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-proline
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> phenylpropyl-glycine
      <400> 111
£.]
ŦŢĴ
      Xaa Leu Gly Xaa Tyr Leu
Ü
[]
ĩ)
       <210> 112
M
       <211>
<212> PRT
M
       <213> Artificial
<220>
L.
       <223> no comment
ļ.i
<220>
<221> MOD_RES
ļ. - !
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222> (4)..(4)
       <223> styryl-alanine
       <400> 112
       Xaa Leu Gly Xaa Tyr Leu
                       5
       <210> 113
       <211>
             6
       <212>
             PRT
       <213> Artificial
```

```
<220>
       <223>
             no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222>
             (4)..(4)
       <223> O-benzyl-serine
       <400>
             113
[]
       Xaa Leu Gly Xaa Tyr Leu
١.
M
[]
       <210> 114
Ti)
       <211> 6
<212> PRT
L.
       <213> Artificial
fij
      <220>
11
      <223> no comment
L:J
1-1
      <220>
<221> MOD_RES
<222> (1)..(1)
ļ., i
      <223> acetyl-proline
      <220>
      <221> MOD_RES
      <222> (2)..(2)
      <223> N,N-dimethyl-lysine
      <220>
      <221> MOD_RES
      <222>
             (4)..(4)
      <223> homophenylalanine
      <400> 114
      Xaa Xaa Gly Xaa Tyr Leu
      1
```

```
<210>
             115
       <211>
       <212>
             PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetylproline
       <220>
       <221> MOD_RES
       <222>
             (4)..(4)
£=1
       <223> homophenylalanine
4[]
their that their their
       <220>
       <221> MOD_RES
£#
       <222> (5)..(5)
LI)
       <223>
              diaminopropionic acid
F
5
[];
       <400>
              115
U
#=:
       Xaa Leu Gly Xaa Xaa Leu
5
£.;
£=6
       <210> 116
       <211>
       <212>
             PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223>
             acetyl-proline
       <220>
       <221>
             MOD_RES
       <222>
              (4)..(4)
       <223> homophenylalanine
```

```
<220>
       <221> MOD_RES
       <222> (5)..(5)
       <223> ornithine
       <400> 116
       Xaa Leu Gly Xaa Xaa Leu
       <210>
             117
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
<223> no comment
411
(i)
       <220>
Ĉ)
       <221>
             MOD_RES
(i)
       <222> (1)..(1)
[i]
       <223> polyethyleneglycol-proline
U
PŲ,
æ
       <220>
<221>
              MOD_RES
W
       <222>
             (4)..(4)
Ļ
       <223>
             homophenylalanine
M
(1)
F=b
       <220>
      <221> MOD_RES
       <222>
             (5)..(5)
      <223> ornithine
      <400> 117
      Xaa Leu Gly Xaa Xaa Leu
      1
      <210>
             118
      <211>
             7
      <212>
             PRT
      <213> Artificial
      <220>
      <223> no comment
```

```
SEQUENCE LISTING.txt
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-gamma-glutamic acid
<220>
<221> MOD_RES
<222> (5)..(5)
<223> homophenylalanine
<220>
<221> MOD_RES
<222> (6)..(6)
<223> ornithine
<400>
       118
Xaa Pro Leu Gly Xaa Xaa Leu
1
                5
<210>
      119
<211>
<212>
      PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD RES
<222>
      (1)..(1)
<223>
       gamma-glutamic acid
<220>
<221>
      MOD_RES
<222>
      (5)..(5)
<223>
       homophenylalanine
<220>
<221>
      MOD_RES
<222>
      (6)..(6)
<223>
     ornithine
```

1571, 4" 1891, 1171 1867, 1847

11.4 P.4.

fu

4

Fat

Harry Harry

ţ.:

<400>

119

```
Xaa Pro Leu Gly Xaa Xaa Leu
                       5
              120
       <210>
       <211>
       <212>
              PRT
       <213>
              Artificial
       <220>
       <223>
              no comment
       <220>
       <221>
             MOD_RES
       <222>
             (1)..(1)
       <223> acetyl-proline
       <220>
[]
       <221>
             MOD_RES
ŧ[]
       <222>
             (2)..(2)
ornithine
       <223>
Ü
C()
       <220>
<221> MOD_RES
ſij
       <222>
             (4)..(4)
       <223> homophenylalanine
Ç=1
ĮĮ,
ļ., i
       <220>
<221> MOD_RES
ĩ,
       <222>
             (5)..(5)
       <223> ornithine
       <400>
             120
       Xaa Xaa Gly Xaa Xaa Leu
       1
              121
       <210>
       <211>
       <212>
             PRT
              Artificial
       <213>
       <220>
       <223>
              no comment
       <220>
             MOD_RES
       <221>
       <222>
             (1)..(1)
```

```
SEQUENCE LISTING.txt
<223> acetyl-proline
<220>
<221> MOD_RES
<222> (2)..(2)
<223> ornithine
<220>
<221>
     MOD_RES
<222>
      (4)..(4)
<223> homophenylalanine
<400>
      121
Xaa Xaa Gly Xaa Tyr Leu
                5
<210>
     122
<211>
      7
<212>
      PRT
<213>
      Artificial
<220>
<223>
     no comment
<220>
<221>
     MOD_RES
<222> (1)..(1)
<223> acetyl-gamma-glutamic acid
<220>
<221>
      MOD_RES
<222> (3)..(3)
<223> ornithine
<220>
<221>
     MOD_RES
<222>
      (5)..(5)
<223>
      homophenylalanine
```

Head Stade Hard

Ü

(1)

er mag

£.L

17

ļ.L

Xaa Pro Xaa Gly Xaa Glu Leu 1 5

<400> 122

```
<210> 123
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
      <223> no comment
       <220>
       <221> MOD_RES
      <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222> (2)..(2)
       <223> ornithine
£:}
417
M
      <400> 123
[]
M
      Xaa Xaa Gly Leu Tyr Leu
(1)
ij
fli
       <210> 124
       <211> 6
7-1
       <212> PRT
[I]
            Artificial
       <213>
<220>
C)
      <223> no comment
ļ.
       <220>
       <221> MOD_RES
      <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222> (2)..(2)
       <223> 4-aza-phenylalanine
       <400>
            124
       Xaa Xaa Gly Leu Tyr Leu
       <210> 125
```

```
SEQUENCE LISTING.txt
       <211> 6
       <212> PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222>
             (4)..(4)
       <223> homophenylalanine
Hand Just
       <220>
(i)
       <221> MOD_RES
[]
<222> (5)..(5)
      <223> 2,4-diaminobutanoic acid
Ü
TI,
      <400> 125
Xaa Leu Gly Xaa Xaa Leu
ļ.
471
      <210> 126
<211> 6
Ļ.L
      <212> PRT
      <213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-proline
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> homophenylalanine
      <400> 126
```

```
Xaa Leu Gly Xaa Lys Leu
       <210>
             127
       <211>
             PRT
       <212>
       <213>
            Artificial
       <220>
       <223>
             no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
4[]
       <220>
(I)
      <221> MOD_RES
E.J
       <222> (4)..(4)
Įij,
       <223> homophenylalanine
ć()
IJ
71,
       <220>
쿒
       <221> MOD_RES
[]
      <222> (5)..(5)
Įų.
       <223> N,N-dimethyl-lysine
1 = 1
[]
       <400>
            127
       Xaa Leu Gly Xaa Xaa Leu
       <210> 128
       <211>
             7
       <212> PRT
       <213>
            Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> N,N-dimethylglycine
       <220>
       <221> MOD_RES
```

```
SEQUENCE LISTING.txt
       <222> (5)..(5)
       <223> homophenylalanine
       <220>
       <221> MOD_RES
       <222> (6)..(6)
       <223> N,N-dimethyl-lysine
      <400> 128
      Xaa Pro Leu Gly Xaa Xaa Leu
      <210> 129
      <211> 6
       <212> PRT
[]
      <213> Artificial
4.1
M
      <220>
Į.;
(i)
      <223> no comment
(I)
      <220>
W
      <221> MOD_RES
711
      <222> (1)..(1)
[]
      <223> polyethyleneglycol-proline
ļ.:
<220>
[]
      <221> MOD_RES
      <222>
             (4)..(4)
į, s
      <223> homophenylalanine
      <220>
      <221> MOD_RES
       <222>
             (5)..(5)
      <223> N, N-dimethyl-lysine
      <400>
             129
      Xaa Leu Gly Xaa Xaa Leu
      <210> 130
      <211>
             7
      <212>
            PRT
      <213> Artificial
```

```
SEQUENCE LISTING.txt
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
      <222> (1)..(1)
       <223> acetyl-gamma-glutamic acid
       <220>
      <221> MOD_RES
       <222>
             (5)..(5)
       <223> homophenylalanine
      <220>
       <221> MOD_RES
      <222>
             (6)..(6)
C)
       <223> N,N-dimethyl-lysine
Į]
[[]
Į"į
      <400>
             130
Ĩį,
(i)
      Xaa Pro Leu Gly Xaa Xaa Leu
Lij
                       5
      1
71
      <210>
             131
<211>
             7
Li,
      <212>
             PRT
f-b
      <213>
             Artificial
<220>
ţ.i
      <223> no comment
      <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223> gamma-glutamic acid
      <220>
      <221> MOD_RES
      <222>
             (5)..(5)
       <223> homophenylalanine
      <220>
      <221> MOD_RES
      <222>
             (6)..(6)
      <223> N,N-dimethyl-lysine
```

```
<400> 131
       Xaa Pro Leu Gly Xaa Xaa Leu
                       5
       <210>
             132
       <211>
       <212>
             PRT
       <213>
             Artificial
       <220>
       <223>
             no comment
       <220>
       <221>
             MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
4[]
(I)
       <220>
<221>
             MOD_RES
Ü
       <222>
             (4)..(4)
Įij.
       <223>
             homophenylalanine
L.
ŦIJ.
       <220>
<221>
             MOD_RES
W
       <222>
             (5)..(5)
f-et
       <223>
             N, N-dimethyl-lysine
M
[]
Į.
      <220>
      <221>
             MOD_RES
      <222>
             (6)..(6)
      <223> norleucine
      <400> 132
      Xaa Leu Gly Xaa Xaa Xaa
      <210>
             133
      <211>
             6
      <212>
             PRT
      <213> Artificial
      <220>
      <223> no comment
```

```
<220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-proline
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> homophenylalanine
      <220>
      <221> MOD_RES
      <222>
             (5)..(5)
      <223> N, N-dimethyl-lysine
[]
      <220>
١D
      <221> MOD_RES
(i)
      <222> (6)..(6)
Ľ.
      <223> cyclohexylalanine
M
14
<400> 133
[[]
      Xaa Leu Gly Xaa Xaa Xaa
12 k
H
#=F
      <210> 134
<211> 6
<212> PRT
i si
      <213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222>
             (1)..(1)
      <223> acetyl-proline
      <220>
      <221> MOD_RES
      <222>
             (4)..(4)
      <223> homophenylalanine
      <220>
      <221> MOD_RES
```

SEQUENCE LISTING.txt <222> (5)..(5) <223> N5-aminocarbonylornithine <400> 134 Xaa Leu Gly Xaa Xaa Leu <210> 135 <211> 7 <212> PRT <213> Artificial <220> <223> no comment <220> <221> MOD_RES <222> (1)..(1)<223> acetyl-gamma-glutamic acid <220> <221> MOD_RES <222> (5)..(5) <223> homophenylalanine <220> <221> MOD_RES <222> (6)..(6)N5-aminocarbonylornithine <223> <400> 135 Xaa Pro Leu Gly Xaa Xaa Leu <210> 136 <211> <212> PRT<213> Artificial <220> <223> no comment

[]

ų[]

ţ()

theth theth theth the the the the

W

M

ŧ

Hadi und adh

Įij.

ļ.i

<220>

<221> MOD_RES <222> (1)..(1)

SEQUENCE LISTING.txt <223> acetyl-proline <220> <221> MOD_RES <222> (4)..(4)<223> homophenylalanine <400> 136 Xaa Leu Gly Xaa Gln Leu <210> 137 <211> 6 <212> PRT <213> Artificial [] they the <220> <223> no comment <220> £() <221> MOD_RES L. <222> (1)..(1)<223> acetyl-proline U <220> ļ. <221> MOD_RES <222> (4)..(4) **[]** <223> homophenylalanine Į.i <220> <221> MOD_RES <222> (5)..(5) <223> 4-aza-phenylalanine <400> 137 Xaa Leu Gly Xaa Xaa Leu <210> 138 <211> 6 <212> PRT <213> Artificial

<220>

```
<223>
            no comment
      <220>
      <221> MOD_RES
      <222>
             (1)..(1)
      <223> acetyl-proline
      <220>
            MOD_RES
      <221>
      <222>
             (4)..(4)
      <223> homophenylalanine
      <400>
             138
      Xaa Leu Gly Xaa Val Leu
Mary Mary
      <210>
             139
(i)
      <211>
<212>
             PRT
Ü
      <213> Artificial
Ĩij.
<220>
FU
      <223> no comment
<220>
<221> MOD_RES
ļaz l
      <222> (1)..(1)
M
      <223> acetyl-gamma-glutamic acid
541
ĝ.
      <220>
      <221> MOD_RES
      <222> (5)..(5)
      <223> homophenylalanine
             139
       <400>
      Xaa Pro Leu Gly Xaa Glu Leu
                       5
       <210>
             140
       <211>
              6
       <212>
             PRT
       <213> Artificial
       <220>
       <223> no comment
```

```
<220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-glycine
      <220>
      <221> MOD_RES
      <222> (2)..(2)
      <223> 2-carboxyazetidine
      <400> 140
      Xaa Xaa Leu Gly Leu Leu
                       5
      1
<210> 141
£[]
      <211> 5
Ēij.
      <212> PRT
£1
      <213> Artificial
(I)
<220>
L.
      <223> no comment
711
121
      <220>
      <221> MOD_RES
L.
      <222> (1)..(1)
i a
      <223> acetyl-(4-fluoro-phenylalanine)
(1)
ļ
      <400> 141
      Xaa Leu Gly Leu Leu
      <210> 142
      <211> 6
      <212> PRT
      <213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD RES
      <222> (1)..(1)
      <223> acetyl-homophenylalanine
```

```
<400> 142
      Xaa Leu Gly Leu Tyr Leu
                       5
      <210> 143
      <211>
             6
      <212>
             PRT
      <213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-homophenylalanine
ť.j
ųį.
      <220>
T()
      <221> MOD_RES
ľ.
      <222> (4)..(4)
[()
      <223> homophenylalanine
(i)
Į.j
71,
      <220>
      <221> MOD_RES
      <222> (5)..(5)
Į.į
      <223> ornithine
ļ.
<400> 143
<u>}.</u>:
      Xaa Leu Gly Xaa Xaa Leu
                       5
      1
      <210> 144
      <211>
             6
      <212>
             PRT
      <213>
             Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-2-carboxyazetidine
      <400> 144
```

```
Xaa Leu Gly Leu Tyr Leu
       <210> 145
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-2-carboxyazetidine
į.į
      <220>
42j
      <221> MOD_RES
£ij.
      <222> (4)..(4)
dest spelt
      <223> homophenylalanine
[i]
IJ
      <220>
îij.
      <221> MOD_RES
      <222> (5)..(5)
      <223> ornithine
LI)
ļ:t
<400> 145
į.i
      Xaa Leu Gly Xaa Xaa Leu
      <210> 146
      <211> 6
      <212>
             PRT
      <213>
             Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-proline
      <400> 146
```

```
SEQUENCE LISTING.txt
Xaa Leu Gly Leu Tyr Gly
                5
1
<210>
      147
<211>
<212> PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-proline
<220>
<221> MOD_RES
<222> (4)..(4)
<223> homophenylalanine
<400>
      147
Xaa Leu Gly Xaa Tyr Gly
                5
<210> 148
<211>
      6
<212>
      PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-proline
<220>
<221> MOD_RES
<222> (6)..(6)
```

<400> 148

<223>

f[]

đ

duch duch dest

erret Hane

ŧ

1,000 mm

F=1

17

[]

ļ.,

Xaa Leu Gly Leu Tyr Xaa

beta-homo-leucine

```
1
                       5
       <210> 149
       <211>
       <212>
             PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
[]
       <222> (4)..(4)
4D
       <223> homophenylalanine
ĩ()
£.1
<220>
ļij
       <221> MOD_RES
Ĺij
       <222> (6)..(6)
N
       <223> beta-homo-leucine
t.j
Ĺ.
       <400>
             149
ğ = L
Xaa Leu Gly Xaa Tyr Xaa
<u>__</u>
       <210> 150
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221>
              MOD_RES
       <222>
             (6)..(6)
       <223> beta-alanine
```

```
<400> 150
      Xaa Leu Gly Leu Tyr Xaa
      <210> 151
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
ŧ.
77. ...
       <220>
Ü
       <221> MOD_RES
<222> (6)..(6)
Įij,
       <223> 6-aminohexanoic acid
Hall
[]
       <400> 151
---
       Xaa Leu Gly Leu Tyr Xaa
IJ
       1
[]
Far
       <210> 152
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222> (6)..(6)
       <223> 4-amino-5-phenylpentanoic acid
```

```
<400> 152
                                     Xaa Leu Gly Leu Tyr Xaa
                                     <210>
                                                                      153
                                      <211>
                                      <212>
                                                                      PRT
                                     <213> Artificial
                                      <220>
                                     <223> no comment
                                     <220>
                                     <221> MOD_RES
                                      <222> (1)..(1)
                                     <223> acetyl-proline
10 that 10 thad 10 that 10 tha
M
                                     <220>
f.j
                                     <221> MOD_RES
II)
                                     <222>
                                                                       (6)..(6)
(i)
                                     <223>
                                                                          4-amino-7-methylheptanoic acid
Ĺij
fij
                                     <400> 153
[2]
H
                                     Xaa Leu Gly Leu Tyr Xaa
ļ.
                                                                                                                             5
                                     1
f=}
                                     <210>
                                                                      154
Fe-
                                     <211>
                                                                       7
                                     <212>
                                                                     PRT
                                     <213> Artificial
                                     <220>
                                     <223> no comment
                                     <220>
                                     <221> MOD_RES
                                     <222>
                                                                       (1)..(1)
                                     <223>
                                                                         acetyl-proline
                                     <400> 154
                                    Xaa Leu Gly Leu Leu Ala Leu
                                     <210> 155
```

```
SEQUENCE LISTING.txt
<211> 7
<212> PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223>
      acetyl-proline
<400> 155
Xaa Leu Gly Leu Tyr Ala Leu
                5
<210> 156
<211> 7
<212> PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-glycine
<400> 156
Xaa Pro Leu Gly Leu Ala Leu
                5
<210> 157
<211> 7
<212> PRT
<213> Artificial
```

[]

Į[]

Ü

[]

[1]

L.

M

l.j

ļ.;

after that three

```
<220>
<223> no comment

<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-proline
```

```
<400> 157
       Xaa Leu Gly Leu Ala Ala Leu
       <210>
              158
       <211>
       <212>
             PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
Į.į
ų[]
       <400> 158
£!]
[]
       Xaa Leu Gly Leu Ala Leu Leu
(I)
       1
Įij.
<210>
             159
Ŋ
       <211>
       <212>
             PRT
į.j
       <213> Artificial
Li)
ļ-1
       <220>
UI.
[]
       <223> no comment
f-t
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <400> 159
       Xaa Leu Gly Leu Leu Ser Leu
       <210> 160
       <211>
             7
       <212> PRT
       <213>
             Artificial
       <220>
       <223> no comment
```

```
SEQUENCE LISTING.txt
```

<400> 160

<221> MOD_RES <222> (1)..(1)

<223> acetyl-proline

<220>

Xaa Leu Gly Leu Leu Leu Leu 1 5

<210> 161 <211> 7

<212> PRT

<213> Artificial

<220>

<223> no comment

<220>

17

£.)

Ü

Tool ord, made

Ē.

nel 11. American

ļ.:

<221> MOD_RES

<222> (1)..(1)

<223> N,N-dimethylglycine

<400> 161

Xaa Pro Leu Gly Leu Tyr Leu

<210> 162

<211> 7

<212> PRT

<213> Artificial

<220>

<223> no comment

<220>

<221> MOD_RES

<222> (1)..(1)

<223> N,N-dimethylglycine

<220>

<221> MOD_RES

<222> (5)..(5)

<223> 2-phenylglycine

<400> 162

```
Xaa Pro Arg Gly Xaa Tyr Leu
       <210>
             163
       <211>
             7
       <212>
             PRT
       <213> Artificial
       <220>
       <223>
             no comment
       <220>
       <221>
             MOD_RES
       <222>
             (1)..(1)
       <223> acetyl-glycine
[]
       <400>
              163
ų[]
day
of Per
       Xaa Pro Leu Gly Leu Arg Leu
(i)
<210>
             164
U
       <211>
              4
[1]
       <212>
             PRT
       <213>
             Artificial
[]
Ļij
       <220>
ļ-1
       <223>
             no comment
171
£.;
       <220>
ļ-t
       <221>
             MOD_RES
       <222> (1)..(1)
       <223> 4-(2-(5,6,7,8-tetrahydronaphthenyl))butyl-glycine
       <220>
       <221>
              MOD_RES
       <222>
             (2)..(2)
      <223>
              homophenylalanine
      <400>
              164
      Xaa Xaa Tyr Leu
      <210>
              165
      <211>
      <212>
             PRT
```

```
SEQUENCE LISTING.txt
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222> (4)..(4)
       <223> homophenylalanine
       <220>
[.]
       <221> MOD_RES
ų)
       <222> (5)..(5)
ĩ!)
       <223>
              N-methylpiperazinepropyl-glycine
C)
[()
(1)
       <400>
              165
Į.į
M
       Xaa Leu Gly Xaa Xaa Leu
       1
£=}
Ų
             166
       <210>
Į.i
       <211>
             6
PRT
       <212>
[]
       <213> Artificial
ļ-:
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> tetrazoleacetyl-proline
       <220>
       <221>
            MOD_RES
       <222>
             (4)..(4)
       <223>
             homophenylalanine
      <400>
             166
      Xaa Leu Gly Xaa Tyr Leu
```

```
1
                       5
      <210>
             167
      <211>
      <212> PRT
      <213> Artificial
      <220>
      <223>
             no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> tetrazoleacetyl-proline
      <220>
      <221> MOD_RES
ij
      <222> (4)..(4)
411
      <223> O-benzyl-serine
M
      <400>
            167
[[]
į.j
      Xaa Leu Gly Xaa Tyr Leu
TIJ
      1
[]
      <210> 168
IJ
      <211>
             6
ļ.i
      <212> PRT
111
      <213> Artificial
<u>[]</u>
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> tetrazoleacetyl-proline
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> homophenylalanine
      <220>
      <221> MOD_RES
      <222> (6)..(6)
      <223> norleucine
```

```
<400> 168
      Xaa Leu Gly Xaa Tyr Xaa
       <210> 169
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
      <220>
      <221> MOD_RES
       <222> (4)..(4)
C)
      <223> O-benzyl-serine
11
(i)
[]
      <400> 169
£()
U
      Pro Leu Gly Xaa Tyr Leu
1
                       5
fij
[]
[]
      <210> 170
      <211> 6
L!
      <212> PRT
es b
      <213> Artificial
131
[]
      <220>
ŧ.Ł
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-proline
      <220>
      <221> MOD_RES
      <222>
             (4)..(4)
      <223> homophenylalanine
      <220>
      <221> MOD_RES
      <222> (5)..(5)
      <223> homo-tyrosine
```

```
<400> 170
      Xaa Leu Gly Xaa Xaa Leu
                       5
       1
       <210>
             171
       <211>
       <212>
             PRT
       <213> Artificial
       <220>
       <223>
             no comment
       <220>
       <221> MOD_RES
       <222>
             (1)..(1)
       <223> acetyl-proline
Ē.)
ŧij.
the first
       <220>
       <221> MOD_RES
Ü
       <222> (2)..(2)
[1]
       <223> 4-aza-hydroxy-phenylalanine
[4]
fi.
₹
       <220>
[]
       <221> MOD_RES
<222> (4)..(4)
ļ.;
       <223> 4-aza-hydroxy-phenylalanine
111
[]
.
       <400>
             171
       Xaa Xaa Gly Xaa Tyr Leu
                        5
       <210>
             172
       <211>
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
```

```
<220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> O-allyl-serine
      <400> 172
      Xaa Leu Gly Xaa Tyr Leu
                      5
      <210> 173
      <211> 6
      <212> PRT
      <213> Artificial
      <220>
      <223> no comment
£.}
ŧ[]
      <220>
£()
      <221> MOD_RES
[]
      <222> (1)..(1)
Ü
      <223> acetyl-proline
M
fu
      <220>
[]
      <221> MOD_RES
<222> (4)..(4)
      <223> 4-nitro-homophenylalanine
ļ.
į.
      <400> 173
      Xaa Leu Gly Xaa Tyr Leu
                      5
      <210> 174
      <211> 6
      <212> PRT
      <213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (1)..(1)
      <223> acetyl-proline
```

```
SEQUENCE LISTING.txt
       <221> MOD_RES
       <222>
             (4)..(4)
       <223> homophenylalanine
       <220>
       <221> MOD_RES
       <222> (5)..(5)
       <223> 4-aza-hydroxy-phenylalanine
       <400>
             174
       Xaa Leu Gly Xaa Xaa Leu
       <210>
             175
       <211>
             6
[]
       <212>
             PRT
۱]
       <213> Artificial
Ĩ()
[]
      <220>
(I)
      <223>
             no comment
£ij,
L.
      <220>
M
      <221>
             MOD_RES
      <222> (1)..(1)
<223> acetyl-proline
W
F=L
171
      <220>
<221>
            MOD_RES
<222>
             (4)..(4)
      <223>
             O-methyl-serine
      <400> 175
      Xaa Leu Gly Xaa Tyr Leu
      1
                       5
      <210>
             176
      <211>
      <212>
             PRT
      <213>
             Artificial
      <220>
      <223>
             no comment
      <220>
      <221>
             MOD_RES
```

```
SEQUENCE LISTING.txt
       <222> (1)..(1)
       <223> acetyl-gamma-glutamic acid
       <220>
       <221> MOD_RES
       <222> (5)..(5)
       <223> O-benzyl-serine
       <400>
             176
       Xaa Pro Leu Gly Xaa Tyr Leu
       <210> 177
       <211> 7
       <212> PRT
      <213> Artificial
1[]
11)
      <220>
[:]
      <223> no comment
Ĩij,
Ĭ()
      <220>
<221> MOD_RES
fIJ
      <222> (1)..(1)
      <223> acetyl-gamma-glutamic acid
[]
L:J
ļ.
      <220>
171
      <221> MOD_RES
[]
      <222>
             (5)..(5)
ķ.b
      <223> O-benzyl-serine
      <220>
            MOD_RES
      <221>
      <222> (7)..(7)
      <223> norleucine
      <400> 177
      Xaa Pro Leu Gly Xaa Tyr Xaa
      <210>
            178
      <211>
             6
      <212>
             PRT
      <213> Artificial
```

```
SEQUENCE LISTING.txt
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> 3-pyridinecarbonyl-proline
<220>
<221> MOD_RES
<222> (4)..(4)
<223> homophenylalanine
<400> 178
Xaa Leu Gly Xaa Tyr Leu
<210> 179
<211> 6
<212>
      PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> 2-pyrazinecarbonyl-proline
<220>
<221> MOD_RES
<222>
      (4)..(4)
<223> homophenylalanine
<400> 179
Xaa Leu Gly Xaa Tyr Leu
1
<210>
      180
```

4.14 4.17. 474. 11".11

C.

Į()

71,

[] W

ļ.,

H

[]

ļ.b

<211>

<212>

<220>

6

PRT <213> Artificial

```
<223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> acetyl-proline
       <220>
       <221> MOD_RES
       <222> (4)..(4)
       <223> homophenylalanine
       <220>
       <221> MOD_RES
     .. <222> (5)..(5)
       <223> dimethyl-lysine
["]
۱]}
(I)
       <220>
[]
       <221> MOD_RES
Ē()
       <222>
             (6)..(6)
Ü
       <223> norleucine
[]
       <400> 180
[]
L.
       Xaa Leu Gly Xaa Xaa Xaa
gs b
       1
                       5
[7]
<210> 181
ļ.i
       <211>
             6
       <212>
             PRT
       <213>
             Artificial
      <220>
      <223>
             no comment
      <220>
      <221> MOD_RES
      <222>
             (1)..(1)
      <223> acetyl-proline
      <220>
      <221>
             MOD RES
      <222>
             (4)..(4)
      <223>
             homophenylalanine
```

```
<220>
      <221> MOD_RES
      <222> (6)..(6)
      <223> homoserine
      <400> 181
      Xaa Leu Gly Xaa Tyr Xaa
                       5
      1
      <210> 182
      <211>
      <212> PRT
      <213> Artificial
      <220>
      <223> no comment
C)
¥[]
      <220>
[[]
      <221> MOD_RES
<222> (1)..(1)
C(1
      <223> acetyl-proline
M
ļ.j
Tij
      <220>
      <221> MOD_RES
î.]
      <222> (4)..(4)
IJ
      <223> homo-phenylalanine
1.5
[]
       <220>
       <221> MOD_RES
       <222> (6)..(6)
       <223> homo-leucine
       <400> 182
       Xaa Leu Gly Xaa Tyr Xaa
                       5
       <210> 183
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
```

```
SEQUENCE LISTING.txt
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-proline
<220>
<221> MOD_RES
      (4)..(4)
<222>
<223> O-benzyl-threonine
<400>
      183
Xaa Leu Gly Xaa Tyr Leu
                5
      184
<210>
<211>
      7
<212> PRT
<213> Artificial
<220>
<223> no comment
<220>
<221> MOD_RES
<222> (1)..(1)
<223> acetyl-gamma-glutamic acid
<220>
<221>
     MOD_RES
<222>
      (5)..(5)
<223> homophenylalanine
<220>
<221>
      MOD_RES
<222> (7)..(7)
<223> norleucine
<400> 184
Xaa Pro Leu Gly Xaa Tyr Xaa
```

1

f[]

(i)

£11

Ĩij, Ų.

ſIJ

L.J Į.i 111

[]

į.

5 <210> 185 <211> 7 <212> PRT <213> Artificial

```
<220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> gamma-glutamic acid
       <220>
       <221> MOD_RES
       <222> (3)..(3)
       <223> ornithine
       <220>
       <221> MOD_RES
f"i
       <222> (5)..(5)
ŕ[}
       <223> homophenylalanine
M
f.I
<400>
             185
(1)
i i
       Xaa Pro Xaa Gly Xaa Glu Leu
Ĉ.
       <210> 186
Ĺij.
       <211> 7
į.i.
       <212> PRT
<213>
             Artificial
[:]
ļ.:
       <220>
       <223>
             no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223>
              gamma-glutamic acid
       <220>
       <221> MOD_RES
       <222> (5)..(5)
       <223>
              O-benzyl-serine
       <400>
              186
       Xaa Pro Leu Gly Xaa Tyr Leu
                       5
```

```
<210> 187
             7
       <211>
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (1)..(1)
       <223> gamma-glutamic acid
       <220>
       <221> MOD_RES
       <222>
             (5)..(5)
<223> O-benzyl-serine
4[]
Ü
<220>
[[]
(ii
       <221> MOD_RES
       <222>
[i]
             (7)..(7)
M
      <223>
             norleucine
æ
<400>
             187
Ш
Ļ
H
      Xaa Pro Leu Gly Xaa Tyr Xaa
C.
- de
      <210> 188
      <211>
      <212> PRT
      <213>
             Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222>
             (4)..(4)
      <223>
            O-benzyl-serine
      <400> 188
      Pro Leu Gly Xaa Tyr Leu
```

```
SEQUENCE LISTING.txt
       <210> 189
       <211>
              6
       <212>
             PRT
       <213>
             Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (4)..(4)
       <223> O-methyl-serine
       <400>
             189
      Pro Leu Gly Xaa Tyr Leu
[]
4[]
       <210> 190
Ĩij
       <211>
             6
[]
       <212> PRT
C()
       <213> Artificial
Ĩ()
Щ
       <220>
M
       <223> no comment
      <220>
<221>
             MOD_RES
ļ.:
       <222> (4)..(4)
II
       <223> 4-aza-hydroxy-phenylalanine
\mathbb{C}_{l}
ğai:
      <400> 190
       Pro Leu Gly Xaa Tyr Leu
                       5
       <210> 191
       <211> 6
       <212>
             PRT
       <213>
             Artificial
       <220>
       <223>
             no comment
       <220>
       <221>
             MOD_RES
       <222>
             (4)..(4)
       <223> homophenylalanine
```

```
<400> 191
       Pro Leu Gly Xaa Tyr Leu
       <210> 192
       <211> 6
       <212> PRT
       <213> Artificial
       <220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (4)..(4)
       <223> homophenylalanine
£.3
\[]
<400> 192
M
      Pro Leu Gly Xaa Glu Leu
Į.į
IJ
      <210> 193
      <211>
C.
      <212>
             PRT
      <213>
             Artificial
ļ.
IJ
      <220>
<223> no comment
]_5
      <220>
      <221> MOD_RES
      <222>
            (4)..(4)
      <223>
            O-benzyl-serine
      <220>
      <221> MOD_RES
      <222>
             (6)..(6)
      <223> norleucine
      <400> 193
      Pro Leu Gly Xaa Tyr Xaa
      1
                      5
      <210> 194
```

```
SEQUENCE LISTING.txt
```

```
<211> 6
       <212> PRT
       <213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> O-methyl-serine
      <220>
      <221> MOD_RES
      <222> (6)..(6)
      <223> norleucine
£:1
ų:j
      <400> 194
The Mark
      Pro Leu Gly Xaa Tyr Xaa
įį,
L!
      <210> 195
<211> 6
Ξ
      <212> PRT
ĩ.
      <213> Artificial
L.
ļ.
      <220>
L.
      <223> no comment
<220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> 4-aza-hydroxy-phenylalanine
      <220>
      <221> MOD_RES
      <222>
             (6)..(6)
      <223> norleucine
      <400> 195
      Pro Leu Gly Xaa Tyr Xaa
                       5
      <210> 196
      <211>
             6
```

```
<212> PRT
      <213> Artificial
      <220>
      <223> no comment
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> homophenylalanine
      <220>
      <221> MOD_RES
      <222> (6)..(6)
      <223> norleucine
21
      <400> 196
4[]
Ü
      Pro Leu Gly Xaa Tyr Xaa
5
Ü
<210> 197
ļ.ļ
      <211> 6
IJ
      <212>
            PRT
      <213> Artificial
IJ
      <220>
<223> no comment
<220>
Fal
      <221> MOD_RES
      <222> (4)..(4)
      <223> homophenylalanine
      <220>
      <221> MOD_RES
      <222> (6)..(6)
      <223> norleucine
      <400> 197
      Pro Leu Gly Xaa Glu Xaa
      <210> 198
      <211>
            6
      <212>
            PRT
```

```
SEQUENCE LISTING.txt
```

<220> <223> no comment

<213> Artificial

<220> <221> MOD_RES

<222> (4)..(4) <223> O-benzyl-serine

<220>

ifth dat ifth

£()

LI)

N

Lij

andin andin

ļ.i

<221> MOD_RES

<222> (6)..(6)

<223> homoleucine

<400> 198

Pro Leu Gly Xaa Tyr Xaa 1 5

<210> 199 <211> 6

<212> PRT

<213> Artificial

<220>

<223> no comment

<220>

<221> MOD_RES

<222> (4)..(4)

<223> O-methyl-serine

<220>

<221> MOD_RES

<222> (6)..(6)

<223> homoleucine

<400> 199

Pro Leu Gly Xaa Tyr Xaa 1 5

<210> 200

<211> 6

<212> PRT

<213> Artificial

```
<220>
       <223> no comment
      <220>
      <221> MOD_RES
      <222> (4)..(4)
      <223> 4-aza-hydroxy-phenylalanine
      <220>
      <221> MOD_RES
      <222> (6)..(6)
      <223> homoleucine
      <400> 200
C.J
      Pro Leu Gly Xaa Tyr Xaa
£[]
      1
                       5
Ľ()
<210> 201
11
      <211>
             6
Ci)
      <212> PRT
L!
      <213>
            Artificial
ΓIJ
₽
      <220>
ij
      <223> no comment
L.
ļ.:
      <220>
<221> MOD_RES
C.
      <222> (4)..(4)
---
      <223> homophenylalanine
      <220>
      <221> MOD_RES
      <222> (6)..(6)
      <223> homoleucine
      <400> 201
      Pro Leu Gly Xaa Tyr Xaa
      <210> 202
      <211> 6
      <212> PRT
      <213> Artificial
```

```
<220>
       <223> no comment
       <220>
       <221> MOD_RES
       <222> (4)..(4)
       <223> homophenylalanine
       <220>
       <221> MOD_RES
       <222>
             (6)..(6)
       <223> homoleucine
       <400> 202
       Pro Leu Gly Xaa Glu Xaa
1.1
١]
<210> 203
<211> 4
[()
       <212>
             PRT
ü
       <213>
             Artificial
Lij
TI.
       <220>
s
       <223>
             no comment
Ĺij.
      <400>
              203
#=L
Pro Leu Gly Leu
ļ-1
      <210> 204
      <211>
             7
      <212>
             PRT
      <213>
             Artificial
      <220>
      <223>
            no comment
      <400>
             204
      Pro Leu Gly Leu Leu Tyr Leu
      <210> 205
      <211>
             5
      <212>
             PRT
      <213> Artificial
```

```
<220>
       <223> no comment
       <400> 205
       Gly Pro Leu Gly Leu
                       5
       <210> 206
       <211> 5
       <212> PRT
       <213> Artificial
      <220>
      <223> no comment
      <400> 206
£.;
      Asp Pro Leu Gly Leu
ŧij.
                       5
      1
that that
      <210>
            207
<211>
             5
Ĺij.
      <212> PRT
Į.į
      <213> Artificial
N
8
      <220>
<223> no comment
Ш
į, L
      <400> 207
Į.
Pro Glu Gln Gly Leu
                       5
      <210> 208
      <211> 4
      <212>
            PRT
      <213> Artificial
      <220>
      <223> no comment
      <400> 208
      Pro Gln Gly Leu
      <210> 209
      <211> 7
      <212> PRT
      <213> Artificial
```

```
<220>
        <223> no comment
        <220>
        <221> MOD_RES
        <222>
              (5)..(5)
        <223>
               diphenylalanine
       <400> 209
       Pro Leu Gly Leu Xaa Ala Arg
       <210>
               210
       <211>
       <212>
              PRT
C)
       <213> Artificial
that that that the that the
       <220>
       <223>
              no comment
(i)
       <220>
<221> MOD_RES
M
       <222>
              (4)..(4)
       <223>
               homophenylalanine
Li)
£=£
       <400>
               210
H
f"j
       Pro Leu Gly Xaa
ļ.
```